B. Amendment to the Claims

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1-56. (Cancelled)

57. (Currently Amended) A method of manufacturing a spacer for use in an electron beam apparatus having an airtight container with electron-emitting devices contained therein and spacers provided in the airtight container, the method comprising:

~~a coating step of proving a film on~~ preparing a spacer substrate having a portion, which is treated ~~, wherein the coating step includes an applying step of applying a liquid film material to the spacer substrate, which is pretreated in advance~~ so that substantially no acute angle in a cross-section is provided at a corner ~~edge~~ portion between a ~~side~~ first surface, which is flat, and a ~~bottom~~ second surface ~~of the spacer substrate, by emitting the liquid film material from an emitting portion~~, wherein the first surface faces a substrate of the container and the second surface is a side surface to the first surface when the spacer is arranged in the container; and

applying a liquid material for a film to at least a part of the corner portion of the spacer substrate from a nozzle by a bubble generated using thermal energy, or by a piezoelectric element.

58. (Currently Amended) The method according to claim 57, further comprising a moving step of changing a relative poison of the ~~emitting portion~~ nozzle and the spacer substrate.

59. (Currently Amended) The method according to claim 57, wherein the applying step includes a step of emitting a droplet of the liquid [[film]] material from a single ~~emitting portion~~ nozzle.

60. (Currently Amended) The method according to claim 57, wherein ~~in the applying step,~~ the liquid [[film]] material is emitted from the ~~emitting portion~~ nozzle by generating [[a]] the bubble in the liquid [[film]] material before the emission.

61. (Currently Amended) The method according to claim 57, wherein in the ~~applying step, the~~ liquid [[film]] material is emitted ~~from the emitting portion~~ by a piezoelectric ~~device~~ element.

62. (Currently Amended) The method according to claim 57, wherein ~~the applying step includes a step of spraying~~ the liquid [[film]] material is sprayed.

63. (Currently Amended) The method according to claim 62, wherein a ~~direction in which the liquid film material is sprayed is limited such that the liquid film~~

~~material is emitted in a predetermined direction~~ part of the sprayed liquid material does not reach the treated portion of the spacer substrate.

64. (Currently Amended) The method according to claim 57, further comprising a ~~film-forming~~ step of forming the film from the applied liquid [[film]] material.

65. (Currently Amended) The method according to claim 57, wherein the liquid [[film]] material comprises a metal element.

66. (Previously Presented) The method according to claim 57, wherein the film is an electrode.

67. (Currently Amended) The method according to claim 57, wherein the liquid material is applied from a plurality of ~~emitting portions are used in the applying step~~ nozzles.

68. (Currently Amended) The method according to claim 57, wherein the liquid [[film]] material is applied simultaneously to the [[side]] first surface and the ~~bottom~~ second surface of the spacer substrate.

69. (Currently Amended) The method according to claim 57, wherein the spacer substrate is ~~pretreated~~ treated by rounding or tapering the corner [[edge]] portion between the [[side]] first surface and the ~~bottom~~ second surface of the spacer substrate.

70. (Currently Amended) The method according to claim 57, wherein the spacer substrate is ~~pretreated~~ such that the following relationship is satisfied:

$$(t^2 + 4h^2) < s^2 < (t+2h)^2,$$

wherein t is a maximum value of a thickness of the spacer substrate when the film is formed from the liquid material, h is a height of the film, and s is an inner peripheral length of a section of the film.

71. (Previously Presented) The method according to claim 69, wherein the rounding of the spacer substrate is carried out such that a radius r of a curvature is 1% or more of a maximum value t of a thickness of the spacer substrate where the film is formed.

72. (Previously Presented) The method according to claim 57, wherein the spacer substrate is processed using hot-draw, which is carried out with relationship $S_2 > S_1$ being satisfied, where S_1 is a cross-section of a desired spacer substrate and S_2 is a cross-section of a spacer base material, with both ends of a spacer base material being fixed, a cross-section of the spacer base material being similar in shape to that of the spacer substrate, a part of the spacer base material in a longitudinal direction being heated to a

temperature at or above a softening point while one end portion is fed in a direction of the heated portion at a velocity of V_1 and the other end portion is drawn in the same direction as that of V_1 at a velocity of V_2, and a relationship $S_1 / S_2 = V_1 / V_2$ being satisfied, and

wherein the spacer base material is cooled after the hot-drawn spacer base material is cut to have a desired length.

73. (Previously Presented) The method according to claim 57, wherein the spacer substrate is formed of glass or ceramic.

74. (Currently Amended) The method according to claim 57, wherein a high resistance film having a surface resistance of at least $10^5\Omega$/square is formed on the spacer having the film formed thereon.

75. (Currently Amended) The method according to claim 74, wherein the high resistance film has a surface resistance value of 10^5-10^{12} Ω/square.

76. (Previously Presented) The method according to claim 75, wherein the film has a surface resistance value of 1/10 or less of that of the high resistance film, and less than 10^7 Ω/square.

77. (Currently Amended) The method according to claim 74, wherein~~, in the applying step~~, the [[film]] liquid material is applied to a part of a ~~pretreated~~ treated area.

78. (Currently Amended) A method of manufacturing an electron beam apparatus having an airtight container with electron-emitting devices contained therein and the spacers provided in said airtight container, ~~comprising,~~ wherein the spacer is manufactured according to claim 57.

79. (Currently Amended) A method of manufacturing a spacer for use in an electron beam apparatus having an airtight container with electron-emitting devices contained therein and spacers provided in the airtight container, the method comprising:

~~a coating step of proving a film on~~ preparing a spacer substrate having a portion, which is treated ~~, wherein the coating step includes an applying step of applying a liquid film material to the spacer substrate, which is pretreated in advance~~ so that substantially no acute angle in a cross-section is provided at a corner ~~edge~~ portion between a ~~side~~ first surface, which is flat, and a ~~bottom~~ second surface ~~of the spacer substrate, by emitting the liquid film material from an emitting portion~~, wherein the first surface faces a substrate of the container and the second surface is a side surface to the first surface when the spacer is arranged in the container; and

applying a liquid material for a film to at least a part of the corner portion of the spacer substrate from a nozzle by a bubble generated using thermal energy, or by a piezoelectric element, drop by drop ~~from an emitting portion~~.

80. (Currently Amended) The method according to claim 79, wherein the ~~applying step is performed using~~ liquid material is applied from a plurality of ~~emitting portions~~ nozzles each emitting the liquid [[film]] material drop by drop.